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Jansen, E. Pieter

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# **The Use of Performance Information**

## **Case Studies in Local Social Services Departments**

E. Pieter Jansen<sup>1</sup>

SOM-theme A Primary processes within firms

### **Abstract**

*New Public Management* (NPM) is the commonly used label for the growing popularity of businesslike control tools in governmental organisations. NPM includes several dimensions of change, such as divisionalisation, visible and active control and a prominent role for performance measurement. Developments in Dutch local government demonstrate several of these elements of NPM. Pollitt and Bouckaert (2000) and Pollitt (2002) defined four “levels” of NPM change: (1) “discourse”; (2) “decisions”; (3) “practices” and (4) “results”.

This paper focuses on performance measurement. The politicians and managers at the top of the investigated municipalities took the decision to adopt instruments that generate performance information. This paper seeks to explain the extent to which the information resulting from these instruments is actually being used in the management practices at work floor level. It investigates two categories of explanations for information use: characteristics of the available information (such as its contents, amount and quality) and characteristics of the organization and its routines. The paper thus analyses how “decisions” taken by politicians and top managers to adopt NPM relate “practices” at work floor level.

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## 1. Introduction

Since the 1980s, the application of businesslike control tools in governmental organisations has been a topic in the spotlight of both practitioners and academics. *New Public Management* (NPM) is the commonly used label for these major transitions in controlling governmental organisations (Hood 1995). In defining NPM Hood (1995) identifies seven dimensions of change. First, he identifies a shift towards greater disaggregation of public organisations into separately managed units. Usually, the newly formed divisions are cost centres organised per product or product group. Second, greater competition is introduced, both between public sector organisations and with the private sector. Third, the public sector moves to management practices with proven value in the private sector. Fourth, NPM implies a greater stress on cost efficiency and discipline. Fifth, management becomes more hands-on, i.e. more visible and active control and clearer responsibilities. Sixth, performance measurement plays a much more explicit role: measurable standards are set and play an important role in evaluating the functioning of the organisation. Seventh and finally, governmental organisations under the influence of NPM become more result-oriented and use output measures.

Developments in Dutch local government demonstrate several elements of NPM as described above. During the 1980s and 1990s the organisation structures of most large Dutch municipalities have been reorganised drastically. Divisionalisation, which is the first dimension of NPM as identified by Hood, is generally adopted by Dutch municipalities (Schrijvers 1988; Van Helden 1992; Ter Bogt/Van Helden 1992). Divisionalisation implies the devolution of tasks within an organisation (to departments or divisions) without diminishing the constitutional responsibility of the city council (Ter Bogt 1995: 84; Ter Bogt 1994; Schreuder 1991: 223).

Until the beginning of the 1980s, the organisation structures of Dutch municipalities were very centralised and hierarchical. The city manager was the central public servant in the organisation. The formulation of policy was located at the central level in the organisation under the city manager's direct authority. The implementation of the policy thus formulated took place in the several departments of the municipal organisation, but again under the authority of the city manager. Consequently, there was a partial separation between the formulation and the implementation of policy: the city

manager was directly involved in policy formulation; although he was formally responsible, he usually did not directly interfere with implementation.

In the new organisation model the influence of the separate departments or divisions of the municipal organisation is comparatively large, at the expense of the position of the city manager and his staff. City managers used to be dominant in policy formulation, but have now become coordinators between different policy fields and between politicians and civil servants. Formulation and implementation of policy in specific fields are integrated and mainly take part in the separate departments. The departments assist the Mayor and Aldermen in formulating policy goals in their specific fields. The responsibility for managing finances, personnel and, most importantly, for production processes has moved to a large extent from the central to the divisional management. Municipal social services departments, for instance, advise the Municipal Executive on issues and policy concerning their specific specialisation, produce the products as agreed and largely manage their own finances and internal organisation. In the previous organisation model, the city manager and his staff had a much more central position in formulating policy and managing the organisation and its production processes (Schrijvers 1988; Ter Bogt/Van Helden 1992; Van Helden 1997; Schrijvers 1993).

Contract management is a characteristic phenomenon in the new divisional municipal organisation structure. It is a crucial concept in both the internal decentralisation of tasks, and management control. The so-called management contract is one of the two most important elements in contract management. The management contract specifies the throughput to be performed and the output to be realised by a particular division within a certain time span. The inputs available in order to generate the contracted output are also defined in the management contract. A management contract is thus a written agreement between the management of a division on the one hand, and the central management and the Municipal Executive on the other, concerning the performance to be generated by the division involved.

The other important and characteristic element in contract management is the so-called management report. A management report addresses questions concerning the extent to which the performance specified in the management contract has actually been achieved. In this document, divisional managers account for their output and for discrepancies between the realised output and the previously set targets. Often, management reports also involve the accounting for the realised outputs in relation to the consumed inputs. Together, the management contracts and the management reports

are essential to enable the central management and the Municipal Executive to control the divisions. Management contracts describe the targets of the divisions and the means to reach these targets. The extent to which the divisions realise the targets at the end of a specific period is described in management reports (Van der Krogt/Spijker 1989; Haselbekke *et al.* 1990: 36-37; Van Helden 1992; for an evaluation of contract management see Korsten 1996). The concept of contract management incorporates several elements of NPM: a focus on output, visible control, clearer responsibilities and performance measurement. All in all, performance information is essential in the newly developed concept of contract management. Management reports, which form an essential link in the management control process of divisionalized governmental organisations, consist mainly of performance information. This information aims at accounting for the achievement of the targets set in management contracts.

## **2. Conceptual model and research questions**

Pollitt (2002) distinguishes four levels of change related to NPM. These four levels range from abstract to specific. Discourse, the first and most abstract level, incorporates the ideas of running the public sector in a more businesslike manner, ideas usually owned by the politicians at the top of the organization. Decisions, usually taken by top managers, constitute the second, more specific level of NPM. These decisions, based on the discourse of NPM, relate to the actual development and implementation of businesslike instruments. Examples of such instruments are systems for performance measurement and systems for the calculation of unit costs. Management practices, the third level, are the actions by work floor management; it relates to the extent to which the newly implemented businesslike instruments are actually embedded in daily management practices and styles. The role of management information, resulting from the new management instruments indicates whether or not this third dimension of change has been realized. *Results*, i.e. the effects of the changes for the organization's citizens or customers, constitute the fourth level of change.

Pollitt and Bouckaert (2000) and Pollitt (2002) conceptualize public sector reforms in a manner that implies a hierarchy ranging from the abstract level of discourse to more specific decisions and practices. However, Burns and Scapens (2000) adopted an approach in which they explicitly stress that “rules” (comparable with “decisions”, Pollitt 2002) and “routines” (Pollitt 2002: “practices”) are mutually, and not

hierarchically, related. Burns and Scapens (2000) used an institutional framework to conceptualise management accounting change. In their framework, they use four concepts: rules, routines, institutions and actions. Rules are the formalized statements of procedures, whereas routines are the procedures actually in use. In the context of management accounting, rules comprise the formal management accounting systems, as they are set out in the procedure manuals, whereas routines are the accounting practices actually in use (Burns / Scapens 2000: 7). Institutions are the structural properties which comprise the taken-for-granted assumptions about the way of doing things, which shape and constrain the rules and routines, and determine the meanings, values and also powers of the individual actors. Rules, routines, institutions and actions are in a continuous process of change. However, new rules and routines may also be introduced in a more discrete way.

NPM in general and, more specifically, the changes in Dutch local government as described in section 1 of this paper are usually introduced in a discrete way, initiated by politicians at the top level of the organization. Initiation of NPM seems to follow the hierarchical line of reasoning as set by Pollitt and Bouckaert (2000) and Pollitt (2002). The widespread adoption of divisionalised organization structures and the dispersion of the concept of contract management indicate that Dutch municipalities have been successful in realising changes of the first level, i.e., changes that concern the discourse of NPM. Also, important changes of the second level are realised: 75% of the Dutch municipalities apply output-oriented planning and control instruments (Moret, Ernst and Young 1997: 106-110) and a majority has a medium-term plan, an output budget, a hierarchical planning and control system, and performance reports (Van Helden/Ter Bogt 2001). However, in other respects second-level changes are limited: performance standards and instruments to audit outcomes are rare (Van Helden/Ter Bogt 2001; Ter Bogt/Van Helden 1999; Beukert 1998). Third level changes, as defined by Pollitt (2002) are limited. Changes in practices imply that the developed businesslike instruments are also actually embedded in daily managerial activities. This implies that politicians and managers also actually use the newly developed instruments, such as performance reports. However, on the basis of a survey Ter Bogt (2001) concluded that as a source of information these documents are of limited importance to the investigated aldermen. Also the case studies to be presented in this paper led to the conclusion that only a minority of responsible politicians and top managers thoroughly analyses the available performance information. Furthermore, performance-related pay and resignation of managers, based on explicit performance measures is rare (Weggemans/Koek 1999).

There is little evidence about changes at the fourth level, i.e., results. However, considerable results of NPM seem unlikely, if NPM affected management practices to only a limited extent.

This paper investigates the relationship between decisions and practices. NPM is usually introduced in a discrete manner: new rules are set and, accordingly, the development of new instruments is initiated. The purpose of this paper is to explain the extent to which newly developed instruments are actually being used by investigating how well the information (resulting from the new instruments) fits the information needs of the users of this information. Thus, it seeks to explain the relation between decisions or rules on the one hand and practices or routines on the other. It does so by using case studies. The paper investigates the social services departments of three large Dutch municipalities. These three organisations have in common that they have adopted contract management, implying that they periodically release performance reports of some form to inform both its management and the responsible politicians.

There are various aspects of systems for performance information that may explain information use. First, information load might influence the intensity of information use and the role of this information in the management control process. Information load is the amount of information that managers and politicians receive. Davenport and Beers (1995: 65), for instance, concluded that managers and process workers are very often confronted with too much information for it to be thoughtfully considered in the decision making process. Chewning and Harrell (1990: 527) found support for the hypothesis that individuals who experience overload exhibit a bell-shaped pattern of information usage. Therefore, this research takes information load into account in order to interpret differences in information use. Two aspects of information load are dealt with: perceived and actual information load. Perceived information load relates to the amount of information as perceived by its users: managers and politicians are asked whether, in their opinion, the amount of information included in performance reports is too small, adequate or too big. Actual information load is assessed by quantifying the amount of information by means of a measure developed for the purpose of this research.

Second, the quality of performance information could influence the extent to which this information is used. Reliability of the data underlying the performance information and whether these data are up-to-date are relevant aspects of information quality. Furthermore, interpretation and analysis of performance figures might contribute to the quality of performance information, as perceived by its users. Finally, policy relevance

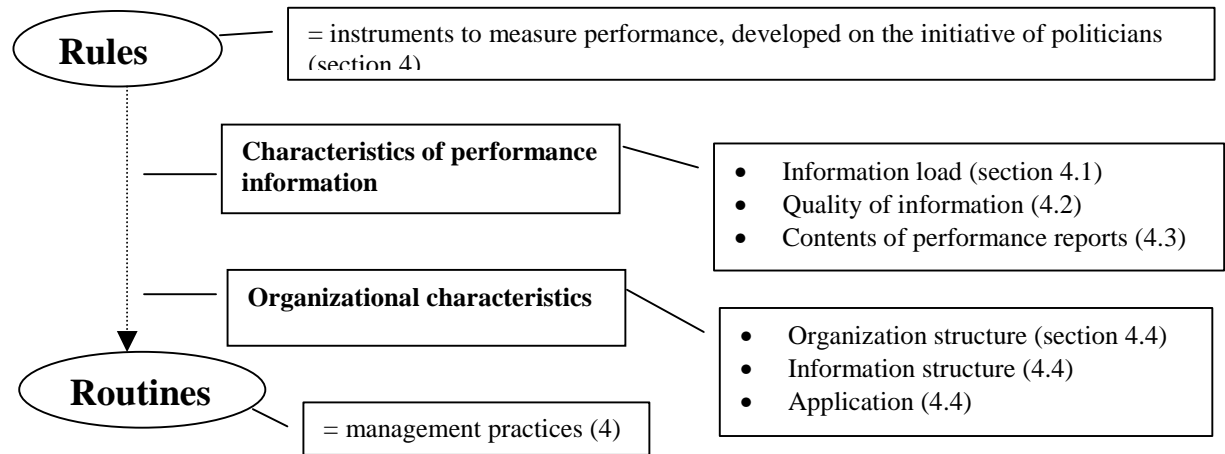
(i.e., whether the performance information provides insight into the implementation of the formulated policy) is another aspect of the quality of performance information.

Third, the contents of performance reports may influence the extent to which these documents are actually used. Performance reports aim at satisfying information needs of politicians and managers. The extent to which these documents succeed in doing so, may contribute to the role they play in the management control processes of the organisation. Therefore, this paper investigates the match between the contents of performance reports on the one hand and the information needs of politicians and managers on the other. It highlights two aspects of the contents of information: the topics included and the level of aggregation these topics are dealt with. The topics concern aspects of performance on the primary processes, such as throughput time and unit costs (see table 1, section 3). Levels of aggregation relate to the extent of detail of the information, such as whether or not the information is specified for each separate organisational unit.

Finally, organisation structure, information structure and applications of performance information are taken into account. Organisation structure relates to the division of tasks and responsibilities. Concerning organisation structure, Shick, Lawrence and Gordon (1990: 204) argued that the ability of an organisation to handle large amounts of information is mainly determined by its structure. Daft and Lengel (1986: 559) even concluded that an organisation's structure can be tailor-made, such that managers receive an optimal amount of information. Information structure involves the dissemination and the application of performance information within organizations. Some organizations dispose of several reports with performance information, where each report is written for a different group of information users. Dissemination implies who receives which information. In the organization's management processes reports can be applied for various purposes: planning, monitoring, evaluation and reward (Davenport and Beers 1995: 71; Birnberg and Snodgrass 1988: 447). Furthermore, Briers and Hirst (1990: 374) indicated that performance measurement can be a pressure device, a source of motivation and/or a means to identify problems and improvements. Figure 1 summarizes the conceptual framework of this paper.



**Figure 1: conceptual framework**



This paper is structured as follows. Section 3 describes the cases in which the empirical research was conducted. It describes the tasks, the structures and the potential performance indicators of the selected organisations. Furthermore, it explains the selection of the organisations, the investigated documents and the interviewees. Section 4 contains the case material and interpretations. First, it describes actual use of performance information by those who are most involved in the process. Subsequently, it seeks to explain differences in information use between the organisations and between individual incumbents. In doing so, this paper makes use of the concepts described above. Section 4.1 elaborates the influence of information load. Section 4.2 discusses the influence of the quality of information. Section 4.3 compares the contents of performance reports with the information needs of the interviewees and investigates how this relates to information use. Section 4.4 investigates information use in relation to the organisation structure, the information structure and the applications of the performance reports. Section 5 concludes the paper.

## 2. Case studies

The most significant task of local social security departments in the Netherlands is to execute the General Social Security Act and related regulations.<sup>2</sup> Although municipalities have a limited discretion to set their own policy, most of the regulations relevant to local social services departments are set by the central government. The implementation of the General Social Security Act provides payments to citizens who have no other means to cover the basic costs of living. These payments can be both regular, i.e., monthly, or one-off. Regular payments are meant for the normal costs of living. One-off payments or Supplementary Benefits are allocated to cover exceptional, but essential expenses, such as the purchase of a new washing machine or refrigerator.

Generally, the purposes of local social security departments are summarised in three keywords: income, care and labour. “Income” refers both to the allocation of benefits and monitoring the entitlements of clients to these benefits. “Care” implies looking for signs of poverty and, if necessary, helping clients to find solutions, such as applying for Supplementary Benefit. “Labour” relates to the coaching and the (re)qualifying of clients to participate in the regular labour market. The implementation of the regulations and the performance of the tasks of social services departments are organised in six primary processes. First, registration is a primary process which concerns the initial contact between a client and the department. During the registration an employee of the social security department talks with the client and gathers some essential information. The social services department advises the client whether to apply for a social security payment and, if relevant refers them to other organisations. Second, the handling of applications is an important (and time-consuming) primary process. It implies the gathering of information (for instance by checking the archive, interviewing the client and getting him to fill out several forms), the interpretation and analysis of the resulting information and making a decision concerning the benefits to be paid to the applicant. Third, for each individual client social services departments periodically (usually once a year) do a reinvestigation, a primary process comparable to the handling of an application, implying reassessing

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<sup>2</sup> Examples of other regulations implemented by local government are the Assistance Decree for the Self-employed, the Homes for the Elderly Act, the Income Benefits for the Elderly and Partly Disabled Formerly Self-employed Act and The Income Benefits for the Partly Disabled Unemployed Workers’ Act. A detailed description of the regulations is beyond the scope of this paper.

entitlements of existing clients. Fourth, final investigations take place if a client is no longer entitled to receive benefits. This primary process results in termination of payments and (if the client has received too much) in claims on the client. Fifth, social services departments handle declarations of income. Every month, most beneficiaries have to fill out a form (the declaration of income) in which they indicate whether their relevant circumstances have changed. Sixth, for urgent reasons social services departments sometimes give an advance to individual beneficiaries. Concerning the execution of primary processes various elements of information can be included in performance reports. Table 1 describes information elements which offer insight into the work of social services departments. This information can be reported for each separate primary process.

This paper studies the use of the performance information indicated by table 1 in three large Dutch municipalities, i.e., Utrecht, Eindhoven and Groningen. Utrecht is located in the middle of the Netherlands and has approximately 235,000 inhabitants. Social Services are part of the Department of Welfare and had 15,984 clients at the time the interviews were held. Apart from Social Services the Department of Welfare also incorporates the Municipal Bank of Loans, Public Welfare and Labour Market Policy, Social Renewal and Target Groups. Social Services are divided in three districts. Each district is subdivided into 6 to 8 production sections, which execute the primary processes. Eindhoven, a city of the Southern part of the Netherlands, had 198,000 inhabitants and a Social Services Department with 9,512 clients. The implementation of the primary processes is organised in four production sections. Finally, Groningen had 169,000 inhabitants and a Social Services Department with 16,804 beneficiaries. The organisation structure of this department contains eight production sections which execute the primary processes.

**Table 1: Topics in performance information for social services departments**

Topic	Definition
Volume	the number of times/the frequency in which a primary process has been executed; i.e. the organisation's production
Unit costs	the average costs of executing a primary process
Work in progress	the number of files waiting to be handled, for instance the number of submitted applications which have not been handled yet
Throughput time	the time between the impulse to execute a primary process on a file and the time that this process has been executed
Home visits	the number of clients visited at home as part of the execution of primary processes
Conversations with clients	the number of conversations with clients as part of primary processes
Summons to clients	the number of written requests to clients to turn up for an interview or to supply the municipality with information
Response rate	the percentage of clients which reacts on a request to supply information or to turn up for an interview
Timeliness	the percentage of primary processes which is executed on time, i.e. within the time constraints defined in the regulations

Basically, there are three categories of incumbents who receive performance information. First, the production manager is in charge of all production sections. All the three cases have several production sections; each section has its own section manager. The organisation's production manager is in charge of the section managers. The investigated organisations have in common that performance reports are not used below the level of the production manager. Second, the investigated departments have a category of managers (such as managing directors and controllers) who operate on the same or on a higher hierarchical level than the production manager and who are, compared to the production manager, indirectly accountable for the realised production. Third, the Municipal Executive is an important receiver of performance information. Each of the three organisations has several types of performance reports. Some reports aim at informing the Municipal Executive, others at informing managers at various hierarchical levels in the organisation. The municipalities have in common that they all

have a separate report to inform politicians. This paper investigates the use of performance reports by their users, i.e., all incumbents in the hierarchical line between the production manager and the relevant members of the Municipal Executive. Application of these criteria led to a selection of respondents as indicated in table 2.

**Table 2: Respondents/receivers of performance reports**

<b>Respondent</b>	<b>Utrecht</b>	<b>Eindhoven</b>	<b>Groningen</b>
Councillor of Social Services	*	*	*
Councillor of Finance	*	*	*
Managing director	*	*	*
Manager Social Services <sup>3</sup>	*	--	--
Controller	*	*	*
Production manager(s)	** <sup>4</sup>	*	*

The empirical work in this paper is based on case studies and although not in the mainstream of accounting research, case studies have the potential to generate an understanding of the actual use of performance information in relation its organisational context (Covaleski/Dirsmith/Samuel 1996; Scapens 1990; Lee 1991). Investigating the practical use of performance information in the sphere of life being studied may contribute to explaining this use. However, the potential of case studies to generate generalisable conclusions, and the extent to which they offer an assurance of reliability and validity has often been criticised. In this research, several steps have been taken to warrant generalisability, reliability and validity.

As opposed to quantitative research, case studies do not rely on statistical

<sup>3</sup> Utrecht is the only of the investigated municipalities which employs a manager Social Services. Therefore, the information use a comparable incumbent could not be investigated in the other municipalities.

generalisation. Case studies aim at theoretical or analytical generalisation and thus broaden the explanatory power of theory. This paper is based on the premise that general theoretical laws as such do not explain; specific circumstances of the case are essential in explaining the observed phenomena (Scapens 1990). Therefore, explanations in this paper are based on the combined use of relevant theories, specific circumstances of the individual cases and comparison of the three cases.

In order to support the reliability of the results, a case study protocol has been written. The case study protocol contains a detailed description of the field procedures, the data to be gathered and the questionnaires applied. In this respect, this project does not differ from quantitative research. However, it must be noticed that the unique combination and interaction between the respondent, the interviewer, the organisational context and the specific moment of the investigation inevitably affect the findings of the study.

Concerning validity case studies certainly have important strengths: they analyse micro-elements in their specific context. March, Sprouli and Tamuz (1991) explained this by using the metaphor of a portrait: various seemingly isolated characteristics cumulate to an underlying reality, like various elements of a portrait.

Furthermore, the interviewer wrote summaries of every interview taken and submitted these summaries to the respondents. Thus, the adequacy of the interviewer's interpretation of the research data was verified, which should contribute to the validity of the findings. Furthermore, perceptions of various respondents were compared and checked for consistency. Finally, the summaries of the interviews constituted the raw material of this project and were included in the case study database, which was put together in order to support the study's verifiability.

#### **4. Using performance information: case material and interpretations**

In preparing the research, periodic reports containing performance information were listed. First, each of the investigated social services departments compiled a management report to the Municipal Executive, usually covering a span of time of three to four months. Second, they all had a performance report on the departmental sections that execute the primary processes, which is meant to inform its managers and/or directors. Third, one of the three cases, i.e. Groningen, also produced reports for each

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<sup>4</sup> At the time of the interviews, Utrecht employed two production managers (i.e., the managers of the districts). Eindhoven and Groningen employed only one production manager.

separate production section of the organisation. The last report informs the organisation's central production manager on the performance of each production department. Each of the mentioned documents has its own group of users. In analysing the use of performance reports, this paper focuses on the use managers and politicians make of the reports specifically written for them. Table 3 summarises the extent to which the incumbents make use of this information. Information use is summarised on a five-point ordinal scale (does not read it - hardly uses it - use as a reference - reads it - thorough analysis).

**Table 3: The use of performance reports**

<b>Respondent</b>	<b>Utrecht</b>	<b>Eindhoven</b>	<b>Groningen</b>
<i>Councillor of Social Services</i>	use as a reference	use as a reference	use as a reference
<i>Councillor of Finance</i>	does not read it	reads it	thorough analysis
<i>Managing director Manager Social Services</i>	hardly uses it	hardly uses it	thorough analysis
	use as a reference	--	--
<i>Controller</i>	does not receive this document	thorough analysis	reads it
<i>Production manager(s)</i>	1. thorough analysis 2. thorough analysis	hardly uses it	thorough analysis

In order to get an insight on the factors which influence the use of performance reports, these documents have been analysed and the receivers of these documents have been interviewed. Various aspects of the information and the organisation have been addressed.

The councillor of Finance in the municipality of Utrecht is the interviewee who makes the least use of performance information. Generally, he does not read this document. For his information concerning Social Services he relies heavily on civil servants that are employed by the central department of the municipal organisation. Basically, the councillor of Finance is only interested in developments with potential financial implications. The civil servants in the municipality's central department monitor all the other departments for any developments which might imply financial risks. According to the councillor of Finance the management report to the Municipal

Executive is an inadequate instrument for timely observations of potential (financial) problems.

The production manager in Eindhoven and the managing directors in Utrecht and in Eindhoven hardly use the performance reports they receive. In executing his duties, the production manager in Eindhoven makes use of information gathered on an ad hoc basis. He regards the performance report he receives as too infrequent and inadequately related to his interests and responsibilities. Usually, he keeps a finger on the pulse by gathering weekly performance information. The managing directors in Utrecht and in Eindhoven both hardly use the performance reports they receive, because they are of the opinion that these documents are of an unsatisfactory quality in their municipalities. They argued that the performance reports mainly contained unanalysed and inconveniently arranged data.

The manager of Social Services in Utrecht does not thoroughly analyse performance reports, but does make the effort to take note of its contents. Sometimes, he uses this document as a guide and as source of information in discussions with other managers of the department and with the Municipal Executive. All the interviewed councillors of Social Services use the performance reports they receive as a reference. The opinions of these incumbents in the three investigated municipalities concerning the role of the management report to the Municipal Executive in the execution of their duties are comparable. This document is not an important source of information; it usually does not contain any information, which is new for them. Other sources of information are much more relevant. Periodic discussions with managers of the department are especially important in this respect.

The controller in Groningen reads the performance report written for the departments' managers and focuses on the developments which may have financial consequences. However, he does not claim that he thoroughly analyses this document. Although he is a politician and not a manager, the councillor of Finance in Eindhoven uses the management report to the Municipal Executive in a comparable way: without thoroughly analysing it, he completely reads this document and focuses on developments which may have consequences in terms of finance, personnel and organisation.

The six remaining respondents, i.e. the production managers in Utrecht and in Groningen, the controller in Eindhoven and the managing director and councillor of Finance in Groningen claim to thoroughly analyse the performance reports they receive. In Utrecht, production managers evaluate the working of the primary processes with



their direct subordinates, every two weeks. For this evaluation, the performance reports are a very important topic for discussion and source of information. On this basis the direct subordinates of the production managers are called to account for the extent to which they have realised their targets. In Utrecht, performance reports for managers come out every week. The production manager of the municipality of Groningen makes use of performance reports in a comparable way to his colleagues in Utrecht. However, the frequency in which performance reports are released and the frequency of evaluations is lower and, on the other hand, more intensive. These reports usually cover a span of time of three months. After the release of the performance reports, the production manager holds individual, oral evaluations with each of his direct subordinates (i.e., the managers of the production sections). These discussions go deeper into the interpretation and explanation of the information and often result in agreements concerning the actions to be taken in order to cope with the organisation's difficulties. The controller in Eindhoven also thoroughly analyses the performance report she receives. Sometimes, she even asks for additional information. The managing director in Groningen reads and analyses the performance documents and discusses their contents in the management team. Finally, the councillor of Finance in Groningen thoroughly analyses the performance report he receives, i.e. the management report to the Municipal Executive.

To sum up, managers and politicians differ considerably in the extent to which they make use of the performance information they receive. Generally, production managers and incumbents working for the municipality of Groningen use this information more intensively than the other interviewees. The literature suggests numerous circumstances that might influence the relevance of performance information. The following subsections of this paper seek to explain the differences in information use by addressing several aspects of the organisational context and of the performance information itself.

#### **4.1 Information load**

This paper addresses two dimensions of information load: perceived information load and actual information load. Perceived information load relates to the experience and perception of the users of performance information. All interviewees were asked how they judge the amount of performance information they periodically receive. Their opinions are summarised on a five-point, ordinal scale (much too small – too small – adequate – too big – much too big).

Actual information load concerns the amount of performance information as measured by the researcher. The previous section of this paper described the primary processes of the investigated organisations and the topics concerning these primary processes that performance reports may include. Information load is expressed in information points, with one information point representing one topic concerning one information process. For instance, reporting the unit costs of a reinvestigation equals an information load of one information point. Reporting this topic for six primary processes, leads to a load of six points. Including four topics for one primary process leads to four information points. Apart from the number of topics and the number of primary processes included in the performance reports, the level of aggregation of the information included influences information load. Under some circumstances and for some information users it is useful to specify the information per production section or per executed regulation. Information load resulting from such a specification equals the information load for one (for example, organisational) unit multiplied by the number of units for which a specification is required.

**Table 4: The information load of a performance report, an illustration**

Primary process	Topics			
	Volume	Throughput-time	Work in progress	Cost per unit
Registrations				
Handled applications				
Reinvestigations				
End investigations				

Table 4 is an imaginary example of performance information, which a periodic management report might contain. The information load of such a table equals 16 information points. If a local social services department implements its primary processes via five producing sections or sub-departments, then a specification of the information for all these subsections requires 80 (5 times 16) information points.

Table 5 sets out both the perceived information load, and the actual load of the interviewed politicians and managers. Analysis of the information load to explain information use by politicians is unlikely to be worthwhile, as all the interviewed politicians, except one, agree that they receive too little performance information. Furthermore, they have in common that they hardly use the performance reports, which they receive. Only one of the interviewed politicians pays considerable attention to this document. Not only the perceived information, but also the actual information load of the politicians was limited, ranging from 0 information points in the municipality of Groningen to 8 information points in Eindhoven. A possible explanation for the limited use of performance reports by politicians is that the information contained in the report for the Municipal Executive is so poor that it is hardly worthwhile.

The research material concerning the information load as perceived by managers is much more interesting. The interviewed managers demonstrate a considerable dispersion in their opinions and behaviours, both concerning the issue of information load, and the issue of information use.

**Table 5: Perceived and actual (in information points) information load**

Respondent	Utrecht		Eindhoven		Groningen	
	Perceived	Actual	Perceived	Actual	Perceived	Actual
Councillor of Social Services	much too small	5	too small	8	Much too small	0
Councillor of Finance	no opinion	5	too small	8	Much too small	0
Managing director	Adequate	176	much too big	138	too big	13
Manager Social Services	too big	176	--	--	--	--
Controller	no opinion	0	much too big	138	adequate	13
Production manager(s)	(1) too small (2) much too big	176	too big	138	too big	110 <sup>5</sup>

<sup>5</sup> This respondent receives a separate performance report for each of the ten production sections. For this research, the performance report for one production section was analysed. The actual information load of this document equals 11 information points.

Noticeable is the fact that perceived information load does clearly not relate to actual information load. In the municipality with the largest actual information load, i.e. Utrecht, managers quite differently perceive this load. One of the production managers argues that the amount of information received is too small, whereas another expressed the opinion that his information load was much too big. The manager Social Services in the same municipality also judges that the information load is too big, whereas the Managing director argues that the information load is adequate. In Eindhoven, the actual information load of managers was smaller than in Groningen. However, in this municipality all the interviewed managers shared the view that the amount of reported performance information was either too big, or much too big. Unlike in Groningen, none of the managers interviewed in Eindhoven argued that the amount of performance information was too small or even adequate, although the actual information load was smaller. In Groningen, the information load of the interviewed managers differs: the production manager has an information load of 110 information points; the controller and the managing director have a (comparatively low) information load of 13 points. Of the investigated municipalities, managers in Groningen exhibit the lowest actual information load. Nevertheless, only one of the interviewees in this municipality perceived the information load as adequate; the others argued that the amount of information was too big. All in all, most interviewed managers argued that the information load was too big. However, the opinion that this load was adequate or too small was most widespread in the municipality with the highest actual information load. Thus, the relationship between perceived and actual information load is weak. Therefore, in explaining the observed differences in the practical use of performance information, both actual and perceived information load will be taken into account.

Table 6 relates the actual information load of managers to information use. Managers with a limited actual information load have in common that they differ little in their use of this information. Of the investigated municipalities, managers in Groningen both have the smallest actual information load, and are relatively intensive information users. In the organisation with the highest actual information load, i.e. Utrecht, managers differ considerably in the extent to which they make use of the reported information. Concerning actual information load, managers in Eindhoven are in an intermediate position: their load is higher than for their colleagues in Groningen and lower than in Utrecht. However, with the exception of the controller (as explained above), the managers interviewed in Eindhoven all extensively use the performance reports. In the municipality with the lowest actual information load the reports are used

intensively. In the two organisations with the higher information load, information use varies, especially in Utrecht.

**Table 6: actual information load and the use of performance information**

Actual information load (in points)	The use of performance information			
	Hardly	As a reference	Read it	Thorough analysis
13			Controller - Groningen	Managing director - Groningen
110				Production manager – Groningen
138	Managing director – Eindhoven Production manager – Eindhoven			Controller - Eindhoven
176	Managing director – Utrecht	Manager Social Services – Utrecht		Production manager 1 – Utrecht Production manager 2 – Utrecht

As well as the actual information load, information use might also relate to perceived information load (see table 7). The situation in Eindhoven supports this assumption: all managers argued that they receive too much information and make use of this information to only a limited extent. However, in Utrecht both the perceived information load and the use of performance information differs, whereas a high perceived information load and information use do not seem to be related. In Groningen, finally, two of the three interviewed managers argued that they receive too much information. Nevertheless, information use in the latter municipality is comparatively intensive. Thus, perceived information load seems to be unrelated to information use. Managers who argued that they are supplied with too much information, are the same managers who hardly use this information.

**Table 7: perceived information load and the use of performance information**

Perceived information load	The use of performance information			
	Hardly	As a reference	Reads it	Thorough analysis
Much too small				
Too small				Production manager 1 – Utrecht
Adequate	Managing director – Utrecht		Controller - Groningen	
Too big	Production manager – Eindhoven	Manager Social Services – Utrecht		Managing director - Groningen Production manager – Groningen
Much too big	Managing director – Eindhoven			Controller – Eindhoven Production manager 2 – Utrecht

To sum up, perceived information overload does not seem to lead to an extensive use of this information. The case studies do indicate that the actual information load relates to information use. The following sections of this paper will investigate further explanations for the use of performance information in the three organisations.

#### 4.2 The quality of information

The vast majority of the interviewed politicians and managers is dissatisfied about the quality of the performance reports they receive. Only three respondents are of the opinion that these documents are of a satisfactory quality. These three interviewees have in common that they work for the municipality of Groningen. They are the councillor of Finance, the managing director and the controller of this municipality.

There were various reasons for this dissatisfaction. In Utrecht, there was a lot of criticism on the registration of data underlying the reported performance information. The information system used in implementing the primary processes was unable to generate performance information. Therefore, performance reports were based on production lists filled out manually by the employees in the production sections. These data were not verified and the resulting reliability of performance information was

questionable. Another complaint often heard in the municipality of Utrecht was that the information included in performance reports is not up-to-date.

The interviews led to the conclusion that the analysis and interpretation of data in performance reports are an important aspect of the quality of these documents. Generally, the incumbents interviewed in Utrecht and in Eindhoven were dissatisfied about the analysis and interpretation included in performance reports. Only the councillor of Finance in Utrecht was satisfied about the quality of the performance information he received concerning social services. However, different from the other interviewees, he did not make use of the performance documents compiled by the social services department. The councillor of Finance keeps informed via civil servants of the central staff of the municipal organisation. The central staff filters and analyses information concerning social services that may have financial implications. If necessary these civil servants inform the councillor of Finance, tailor made to his tasks and responsibilities. Therefore, this respondent does not use the documents compiled by social services, which are analysed in this paper.

All the other respondents in Utrecht and in Eindhoven directly use the performance reports written by social services and have in common that they are dissatisfied about the quality of this information. The most important point of criticism is that these performance reports mainly contain tables and figures and little text or analysis. These documents fail to identify trends, new developments and potential difficulties. The figures included are unclear and need to be analysed and interpreted by the recipients. Performance reports for managers in Utrecht and in Eindhoven contain information for each separate production department. Both the manager of Social Services in Utrecht, and the managing director in Eindhoven are of the opinion that this information is much too detailed: the functioning of individual production departments is relevant for production managers; for them only insight into the performance of the organisation as a whole is relevant.

In Groningen, politicians and managers are much more satisfied about the quality of the reported performance information. The councillor of Finance, the controller and the managing director in this municipality were satisfied. The production manager was satisfied as well, but he did express criticism concerning the extent to which performance reports offered insight into trends in the number of clients of the social services department and the backgrounds (such as rising unemployment figures) behind these trends. The councillor of Social Services expressed criticism about the explanation of figures included in the reports.

### 4.3 The contents of performance reports

In addition to the amount and the quality of information, the contents of performance reports might also have an influence on the use of these documents. Performance reports are meant to satisfy the information needs of politicians and managers. Therefore, this research also attempted to measure these information needs. In measuring information needs, the central question was what politicians and managers actually want to know from the perspective of their tasks and responsibilities.

To measure information needs, a method has been developed that contains several elements. Two concepts are essential: the concept of information points and the concept of information budgets. The information point is a unit that quantifies the amount of information (see section 3.1 of this paper). A characteristic of this method for measuring information needs is that users of performance information select the elements of information they want to receive in their periodic performance reports. The size of their selection is limited by their information budget.

The method consists of three steps. First, the size of the information budget is determined. The size of the information budget is based on an evaluation of existing performance information. The information budget represents the amount of information a respondent is willing to handle and thus reflects his or her personal opinion concerning information load. The information budget is prepared by calculating the actual information load of a respondent (see section 3.1 for the produced results). Then, respondents are interviewed concerning their perceived information load. As also explained in section 3.1, the perceived load is expressed on a five-point ordinal scale. Eventually, the information budget is the result of relating the actual and the perceived information load. The information budget equals:

$$b = e * i$$

whereas  $b$  = the information budget;

$i$  = the number of information points of existing performance information;

$e$  = the factor which expresses the relation between  $b$  and  $i$ ; this relation depends on the evaluation of the amount of existing performance information by the respondent.

If a respondent evaluated the amount of performance information as much too small,  $b > 2*i$



too small  $1.25*i < b < 2*i$   
adequate  $0.875*i < b < 1.25*i$   
too big  $0.5*i < b < 0.875*i$   
much too big  $b < 0.5*I$

Second, respondents indicated what they wanted to receive via periodic performance reports. The basic assumption is that performance information about primary processes relates to the topics explained in table 1. The interviewer presented an overview of these topics and asked the respondent to indicate about which topics he or she wanted to be informed. Furthermore, the level of aggregation of the selected information was a topic of discussion: the performance information could relate to the organisation as a whole or be specified, either per production section or per regulation.

Third, the interviewer calculates the actual information load resulting from the respondent's selection. Then, the interviewer compares this information load with the respondent's information budget: the maximum number of information points the respondent is "allowed" to select. If the selection of the respondent does not accord with the information budget, this is pointed out and the interviewee is asked to revise his selection.

Table 8 compares the information already available in performance reports with the expressed information needs. Column 2 of the table shows the number of topics included in the analysed documents (for a description of possible topics, see table 1). The subsequent columns identify respectively the number of topics omitted, the number of redundant topics and the number of discrepancies. Topics omitted are those topics which, to the opinion of the respondents, are omitted from the existing reports. Redundant topics are topics that the report includes, but are irrelevant to the opinion of the respondents. A discrepancy is a difference between the available information and the information needs, expressed by the interviewees. The number of discrepancies is the total of the omitted and redundant topics.

**Table 8: differences between existing performance information and information needs**

Respondent	Number of topics	Number of omitted topics	Number of redundant topics	Number of discrepancies
<b>Municipality of Utrecht</b>				
Councillor of Social Services	1	2	0	2
Councillor of Finance <sup>6</sup>	-	-	-	-
Managing director	2	3	0	3
Manager Social Services	2	2	0	2
Controller	2	3	0	3
Production manager 1	2	3	0	3
Production manager 2	2	3	0	3
<b>Municipality of Eindhoven</b>				
Councillor of Social Services	4	2	0	2
Councillor of Finance	4	1	1	2
Managing director	4	1	2	3
Controller	4	0	0	0
Production manager	4	1	0	1
<b>Municipality of Groningen</b>				
Councillor of Social Services	0	5	0	5
Councillor of Finance	0	5	0	5
Managing director	4	2	2	4
Controller	4	0	2	2
Production manager	6	1	1	2

Differences between the contents of available information on the one hand, and information needs on the other, provide hardly any clues to explain the use of performance reports. Incumbents of the municipality of Groningen, as well as the production managers of the municipality of Utrecht work intensively with the performance reports they receive.

However, the information provision to politicians concerning primary processes of the municipality of Groningen is very poor. Contrary to the two other municipalities,

<sup>6</sup> The councillor of Finance in the municipality of Utrecht was not prepared to answer the questions related to the contents of this table. In his opinion these questions were irrelevant, because (as described earlier in this paper) civil servants of the central staff in the municipal organisation were responsible for selecting information and signalling developments that might be relevant for the councillor of Finance. The respondent said to be unable to make an adequate selection of information concerning primary processes of Social Services, which might be relevant from the perspective of his tasks and responsibilities.

performance reports for politicians in Groningen do not contain any information that relates to the functioning of these processes. Nevertheless, the intensity of the information use by the councillor of Social Services in Groningen does not considerably differ from his counterparts in the other two municipalities. The councillor of Finance in Groningen uses the performance report for the Municipal Executive even more intensively than the councillors of Finance in Utrecht and in Eindhoven. In the information provision to the Municipal Executive, Groningen both has the highest number of topics omitted, and the highest number of discrepancies. Thus, the contents of performance reports hardly seems to influence the use politicians make of these documents.

For managers, the relation between the topics included in performance reports on the one hand, and their information needs on the other is rather weak as well. In Eindhoven, the performance report available for managers omitted few topics that managers want to be informed about. The number of redundant topics is limited as well: only the managing director argued that he received information on irrelevant topics. Despite the good match between the topics included in the performance reports and the observed information needs, these documents were used to only a limited extent. On the contrary, in Groningen the interviewed managers intensively use the performance information provided. The number of topics omitted from the available reports is limited and comparable to the situation in Eindhoven. However, the number of redundant topics is larger than in Eindhoven. The interview data gathered in Utrecht support the conclusion that the contents of performance reports have little influence on their use. The documents available in Utrecht do not contain redundant topics, but do omit many important themes. The number of topics included in the performance reports is just half or even less than the number of topics the interviewed managers want to be informed about. In this respect the interviewed managers were unanimous in their opinions. Remarkable in this respect is that managers in Utrecht differ considerably in the extent to which they use the information: contrary to the other interviewed managers, production managers are intensive users of performance reports. In Eindhoven the match between the contents of the available information on the one hand and the registered information needs on the other is much stronger than in Utrecht, whereas the managers in Utrecht make more elaborate use of the information.

The level of aggregation of information supplied is also an important aspect of the information needs of the respondents. Performance information in the investigated organisations can be specified per production section or per implemented regulation.

None of the investigated documents contained a specification of information per regulation. Managers in Groningen did not want such a specification. However, in Utrecht and in Eindhoven the desire to receive performance information specified per regulation was widespread: out of all the managers in these two municipalities, there was only one respondent who did not want such a specification. Concerning the specification of performance information per production section the contents of the available performance information and information needs match very well. In Utrecht all the interviewed managers want and actually do receive performance information specified per production section. In Groningen, only the production manager wants to receive information concerning the performance of separate production sections. He is the only manager in this organisation who also actually receives this (rather detailed) information, whereas the other interviewed managers just receive information about the organisation as a whole. In Eindhoven, all managers receive information specified for the separate production sections, but the production manager is the only one with information needs with this level of detail; the other managers are only interested in information about the organisation as a whole. Notable is the fact that in the municipality where the difference in aggregation level of existing information and information needs is the largest (i.e., Eindhoven), the information use is the least.

The match between the topics included in performance reports and information needs have little influence on information use. However, the match between the level of aggregation of available performance information of information needs is correlated with information use.

#### **4.4 Organization structure, information structure and applications**

An organisation's capacity to handle information may be related to its organisational structure. Shick, Lawrence and Gordon (1990: 204) argued that the ability of an organisation to handle large amounts of information is mainly determined by its structure. Daft and Lengel (1986: 559) even concluded that an organisation's structure can be tailor-made, such that managers receive an optimal (or manageable) amount of information. Decentralisation implies the devolution of tasks and responsibilities to lower hierarchical levels and, relevant for of this paper, the handling of related performance information at that level.

The organisation structures of the three investigated departments, however, do not explain the differences in information use. Utrecht clearly has the most decentralised organisation structure. In Eindhoven and Groningen, the production manager is under direct supervision of the managing director. In Utrecht, the number of hierarchical levels between the managing director and the production managers is greater. First, Social Services in Utrecht is not an independent department; it is part of the department of Welfare. The manager of Social Services is formally under the supervision of the managing director. The production managers are under the direct supervision of the manager of Social Services. Thus, Utrecht has one more hierarchical layer than the two other municipalities. Second, Utrecht has two production managers (instead of one, as is the case in Eindhoven and in Groningen) and a third position for a production manager was vacant at the time of the interviews. For the organisation as a whole, the extra hierarchical layer and the splitting of production management in two results in an ability to process a comparatively large amount of information and / or to limit the information load of individual incumbents. However, the information load of individual managers in the municipality of Utrecht is bigger than in the two other organisations. In Utrecht, the information load of managers equals 176 information points, whereas elsewhere this load amounts 13 points (controller and managing director in Groningen), 110 points (production manager in Groningen) and 138 points (all interviewed managers in Eindhoven). In these cases decentralisation neither results in a reduced information load, nor in more intensive use of information.

Amat et al (1994: 120) suggested that the span of control (that is the number of employees under the direct charge of a manager) influences the role of management accounting systems in organisations. Managers with a small span of control are able to interfere more directly in the organisational units they are responsible for and might thus use performance information more intensively. The span of control of production managers in the three municipalities differs considerably: in Groningen the span of control of the production manager is ten, in Utrecht six to eight and in Eindhoven four. Notable is the fact that performance information is used most intensively in the municipality with the highest span of control (i.e., Groningen).

Generally in these three cases, organisation structure seems to have little influence on the use of systems for performance measurement in practice. Also additional hierarchical layers, the splitting up of positions and differences in span of control hardly seem to influence the extent to which managers use information about performance. However, information structure might also influence the relevance and use of

information. Information structure refers to the roles of the individuals specifically involved in writing, receiving and evaluating performance information and the relations between these roles.

The information structure in Groningen clearly differs from the information structure in the two other municipalities. In Utrecht and Eindhoven, all the interviewed managers (production managers, controllers and managing directors) receive exactly the same performance information. In Groningen, however, there is differentiation in the information provided to managers: the production manager receives different performance reports than the controller and the managing director. This organisation has performance reports on each of the separate production sections. Furthermore, there is also a periodic performance report for the organisation as a whole, which does not include information on separate organisational sections. The latter report aims primarily at informing the controller and the managing director, whereas the former aims to inform the production manager. This way of differentiating in the information provision offers the possibility to tailor-make documents to the tasks and responsibilities of the manager concerned and to better utilise the information processing capacity of the organisation. Hierarchically, the production manager is in direct charge of the production sections and from this perspective he receives other information than the controller and the managing director. Differentiation leads to tailor-made and thereby to more potentially useful information.

This paper has already concluded that the level of aggregation of the available information matches the information needs of managers in Groningen. Differentiation in information provision makes it easier to realise such a match. Furthermore, the reports investigated in this municipality deal with most of the topics about which managers want to be informed. Nevertheless, performance reports for managers in Groningen also contain redundant topics. In Eindhoven the aggregation level of information included in performance reports differs from the aggregation level of their information needs. In Utrecht, many topics that are important, in the opinion of the interviewed managers, are missing. Differentiation in information provision seems to relate to a more intensive use of performance reports and a better match between the contents of these reports and information needs. However, it does not lead to the deletion of redundant topics.

In addition to the issue of differentiation, there are also clear differences between the municipalities in the processes which lead to the production of performance reports. In all three municipalities performance reports for the Municipal Executive are structured according to a pre-set standard. The departments concerned receive

instructions about the topics that performance reports should deal with. In Utrecht and in Eindhoven, the same goes for information for managers: the primary processes and the topics to be included in performance reports is prescribed by a standard structure. The reports in these two municipalities mainly contain “raw” figures.

In Groningen, the production of these documents takes place in another way. The section managers write performance reports on their separate sections; these are the documents with the lowest level of aggregation. They aim at accounting for the performance of the separate sections under the control of the production manager. The production manager sets guidelines concerning the topics to be included in these reports, but the topics are not fixed, and may change each period. Furthermore, the documents have to indicate developments with possible financial implications, and contain an analysis of the difficulties identified and possible solutions. Thus, there is no rigid pre-set structure for these reports: the contents depend on recent developments and difficulties in the organisation. The individual managers are directly involved in and accountable for their production section.

Davenport and Beers (1995: 71) argued that performance information requires a context or management process. Systems for performance measurement can fulfil several roles in organisations. Ansari and Euske (1987: 556) identified three functions of these systems. First, such a system can generate information to support the efficient allocation of resources. Second, it might influence the perceptions and behaviour of participants in the organisation. Third, it may be used to secure legitimacy of the external constituencies. Birnberg and Snodgrass (1988: 447) identified various subsystems related to performance measurement, i.e., planning, monitoring, evaluation and reward. Briers and Hirst (1990: 374) defined several roles of performance measurement, such as pressure device, source of motivation, a means to identify problems and a point of departure for implementing improvements. All authors referred to in this paragraph have in common that they emphasise the management processes in which the systems of performance measurement are embedded.

Concerning the management processes in the three municipalities, the interviewed incumbents strongly differ. In Eindhoven, there is hardly any structured management process to deal with performance information. There is no clearly structured procedure for evaluating and discussing performance reports. With the exception (explained earlier in this paper) of the controller, the actual use of this information in Eindhoven is very limited.

Production managers in Utrecht intensively use the performance reports they receive. These reports are released every week. Every two weeks, the production managers discuss the realised performance with the managers of the production sections. During these discussions performance information has a clear role: interventions needed to correct difficulties are agreed. Performance reports are thus an important source of information, and they play a role in monitoring and evaluating the functioning of these departments (Birnberg / Snodgrass 1988: 447), and signalling necessary intervention (Briers / Hirst 1990: 374). Although less frequently and less structured, the manager Social Services works with this information in a comparable manner. However, he only does this if there are serious reasons to do so. The managing director and the controller do not use performance reports within the context of such a structured and clearly defined management process.

In Groningen, performance reports play a clearly defined role. Performance reports for the separate production sections are the basis of periodic discussions in which the production manager assesses the performance of each production section with its manager. The questions asked during these discussions are similar to the instructions set by the production manager regarding the contents of the performance reports, the extent to which the targets have been realised. Furthermore, these meetings look back at the interventions which were agreed to solve difficulties in earlier periods. On the basis of these meetings and reports future management interventions and actions are agreed. Furthermore, targets for the coming months are set.

The production manager, in his turn, writes a performance report which summarises the joint production of the individual sections, and discusses it with the department's management team, consisting of the production manager, the controller and the managing director. Compared to his counterparts in the two other municipalities, the managing director uses this performance report quite extensively, whereas the controller only scans the report for developments that may have financial implications.

In Groningen, performance reports play a role in mobilising support for change: by requiring managers to write their own performance reports and then having a dialogue with them concerning their performance, commitment can be created (Ansari / Euske 1987: 556). Furthermore, these documents play a role in planning, monitoring and evaluation of production (Birnberg / Snodgrass 1988: 447). Also the functions of performance measurement described by Briers and Hirst (1990: 374) can partly be



recognised. Performance measurement in this organisation functions as a way of recognising difficulties and identifying solutions and management interventions.

## **5. Conclusions**

With the introduction of contract management, performance measurement has become an important theme in controlling municipal organisations. Contract management is a form of New Public Management, a businesslike control style that is adopted by many governmental organisations in various countries. The adoption of contract management, usually initiated by the politicians at the top of the organization, result in a discrete introduction of new accounting rules. These rules concern two new accounting instruments, i.e. the management contract and the management report. In both instruments performance information plays a crucial role. This paper investigated the relation between the new instruments on the one hand and the routines of politicians and managers on the other hand. More specifically, it investigated how routines, i.e. information use, of managers and politicians can be explained by the characteristics of the newly set rules or instruments.

Pollitt and Bouckaert (2000) and Pollitt (2002) distinguished four levels of NPM change, ranging from abstract to specific. This paper mainly addressed two of these levels, i.e., “decision” and “practices”. This paper investigated “decisions” by the organization’s top management to adopt businesslike instruments that generate performance information. “Practices” concern the activities of work floor management in the regular control of the organization’s primary processes. This paper challenges the hypothesis that the levels of NPM change are related in a hierarchical manner, i.e., that change at a higher level is a requirement for lower level changes.

This paper gives ground to the conclusion that the characteristics of instruments that are developed in accordance with the rules set by the organisation’s politicians and top managers, only have a limited influence on the practices or routines of work floor managers. The strongest influence on the use of performance information is the availability of a structured management process to handle this information, rather than the characteristics of the imposed instrument to generate this information or the characteristics of this information (Davenport / Beers 1995: 71; Ansari / Euske 1987: 556; Birnberg / Snodgrass 1988: 447; Briers / Hirst 1990: 374). The extent to which performance reports are embedded in the organisation’s management processes is the

most important factor in explaining the actual use of these documents. Respondents who intensively use these reports have in common that these documents are embedded in their control activities. Intensively used performance reports are embedded in the planning, the monitoring, the periodical evaluation, the identification of difficulties and the realisation of improvements. The clarity of the organisational context of performance reports is the most important explanatory variable for the actual use of these documents and also limits information load.

The organisation's information structure considerably influences information use. Information structure relates to the incumbents involved in writing, receiving and evaluating performance information and the relations between these persons. Decentralisation in the information provision by means of differentiation (i.e., compiling separate performance reports for various kinds of managers) has a clear positive influence. Differentiation enables performance reports tailor-made to the information needed by the managers. Imposing the organisation a standard structure for the contents of performance reports has a negative influence on the extent they are actually used. Revising the contents to focus on the current difficulties of the organisation can result in greater use. Setting detailed rules concerning the contents of performance reports does apparently not have a positive influence on the use of performance information in the routines of the organization.

Various authors stressed the importance of information load for the actual use of performance reports (see for instance Davenport / Beers 1995: 65; Chewning / Harrell 1990: 527). This paper focussed on two aspects of information load: the actual information load and the information load as perceived by its users. The relation between the actual and the perceived information load turned out to be very weak. Actual information load seems to relate to information use. In the organisation with the lowest actual information load, politicians and managers use the performance reports relatively intensive. However, analysis of the relation between actual information load and information load in the two other organisations does not lead to clear conclusions. The perceived information load and information use, hardly relate.

Furthermore, the relation between information use and the quality of information is investigated. Respondents who are satisfied about the quality of the information have in common that they all work for the organisation with the most intensive information use. All respondents in the other two organisations are dissatisfied about quality.

In investigating the influence of the contents of performance reports, the information needs of the respondents are registered and compared with the contents of

the available documents. Two aspects of the contents of performance documents have been taken into account: the included topics and the level of aggregation of the information. The extent to which the topics included match with information needs seems to have little influence on information use. However, the match between the level of aggregation of information needs and of the information included in performance reports does relate with information use.

Apart from the characteristics of performance information described above, the influence of organizational characteristics has been addressed. Organisation structure and especially decentralisation on the hand and the handling of information by the organisation on the other are hypothesised to relate (Shick et al 1990: 204; Daft / Lengel 1986: 559). However, in the case studies there are no indications that decentralisation of the organisation structure leads to a more intensive use of information.

The development of NPM practices only partly depends on NPM decisions. This paper investigated performance measurement as an important aspect of NPM decisions and the use of the resulting information as an aspect of NPM practices. New management practices may also develop, if the decisions taken at a higher hierarchical level in the organization inadequately fit with the tasks of work floor management.

The levels of NPM change (i.e., discourse, decision, practices and results) only partly relate in a hierarchical manner: NPM change at a lower level does not necessarily require a good fit with higher level changes. Active use of performance information can only be partly explained by the contents of this information, i.e., the characteristics of the used instruments. All in all, NPM change implies both top-down and bottom-up relation between the four identified levels of change.

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